

## Two new muricids (Gastropoda: Muricidae) from West Africa

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**KEYWORDS.** Gastropoda, Muricidae, *Muricopsis*, *Vaughtia*, West Africa, new species.

**ABSTRACT.** A short review of the recent works pertaining to the West African Muricidae is given and two new species are described. *Muricopsis haidari* n. sp. from Senegal is compared with *M. seminolensis* Vokes & Houart, 1986, *M. rutilus rutilus* (Reeve, 1846) and *M. rutilus mariangelae* Rolán & Fernandes, 1991. *Vaughtia squamata* n. sp. from Mauritania is compared with *V. gruveli* (Dautzenberg, 1910) and *V. babingtoni* (Sowerby, 1892).

**RESUME.** Les travaux récents concernant les Muricidae d'Afrique Occidentale sont abordés et brièvement analysés. Deux nouvelles espèces sont décrites. *Muricopsis haidari* n. sp. du Sénégal est comparée avec *M. seminolensis* Vokes & Houart, 1986, *M. rutilus rutilus* (Reeve, 1846) et *M. rutilus mariangelae* Rolán & Fernandes, 1991. *Vaughtia squamata* n. sp. de Mauritanie est comparée avec *V. gruveli* (Dautzenberg, 1910) et *V. babingtoni* (Sowerby, 1892).

### INTRODUCTION.

The West African muricids have been revised by Houart (1996, 1997) who recorded 66 Recent species. New taxa of Muricidae have been discovered, described and commented since then. The West African muricid *Murex gubbi* Reeve, 1849 previously classified in *Chicoreus* (subfamily Muricinae) was made the type species of *Chicocenebra* (subfamily Ocenebrinae), based on radula and shell morphology, by Bouchet & Houart (1996). Vermeij & Houart (1999) described the new genus *Africanella* (subfamily Ocenebrinae) to include two West African species formerly assigned to

*Ocenebra* Gray, 1847; they also reintroduced the genus *Inermicosta* Jousseume, 1880 (subfamily Ocenebrinae) and they proposed a new combination to assign *Trophon gruveli* Dautzenberg, 1910 to *Vaughtia* Houart, 1995 (subfamily Ocenebrinae). Finally, a new *Muricopsis* was described by Houart & Rolán, 2001 from Annobón Island (Equatorial Guinea).

### Abbreviations

MNHN: Muséum national d'Histoire naturelle, Paris, France.

lv.: live collected.

dd: empty shells

SHOULDER	
IP	Infrasutural primary cord (primary cord on shoulder)
adis	Adapical infrasutural secondary cord
abis	Abapical infrasutural secondary cord
CONVEX PART OF THE TELEOCONCH WHORL AND SIPHONAL CANAL	
P1	Shoulder cord
P2-P6	Primary cords
si	All secondary cords
example: s1 = secondary cord between P1 and P2; s2 = secondary cord between P2 and P3, etc.	
ADP	Adapical siphonal primary cord
MP	Median siphonal primary cord
ABP	Abapical siphonal primary cord
ads	adapertural secondary cord on the siphonal canal
ms	median secondary cord on the siphonal canal
APERTURE	
ID	Infrasutural denticle
D1-D5	Apertural denticles
abs	abapertural secondary cord on the siphonal canal

Text conventions (see Figs 1 and 12) (after Merle, 2001)

## SYSTEMATICS

Family MURICIDAE Rafinesque, 1815

Subfamily MURICOPSINAE Radwin & D'Attilio, 1971

Genus *Muricopsis* Bucquoy & Dautzenberg, 1882

Type species by original designation: *Murex blainvillei* Payraudeau, 1826 (= *Murex cristatus* Brocchi, 1814).

Recent; Mediterranean.

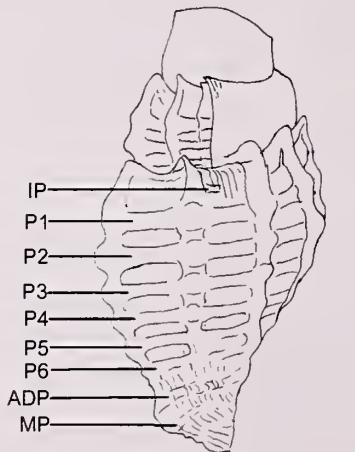
*Muricopsis haidari* n. sp.

Figs 1-5

**Type material.** Senegal, Cap Vert, Dakar, Gouye teni M'both, october 2002, 14°36'39" N, 17°26'21" W, basalt, 27 m, holotype and 1 juvenile paratype MNHN (lv.); Cap Vert, Dakar, TIWA wreck, october 2002, 14°36'43" N, 17°26'56" W, 32-37 m, 2 paratypes (adult and juvenile) coll. R. Houart (lv.).

**Distribution.** Presently known only from the type material, living at 27-32 m.

**Description.** Shell small for the genus, up to 8.95 mm in length at maturity (holotype), slender, lanceolate, heavy, nodose. Spire very high with 1.40-1.45 protoconch whorls, up to 5 narrow, strongly shouldered, nodose teleoconch whorls; suture impressed. Protoconch small, shouldered, whorls carinate, with a strong, single keel adapically; terminal varix delicate, thin, weakly erect, very weakly curved.



**Fig. 1.** *Muricopsis haidari* n.sp. Juvenile (2.1 mm), paratype coll. R. Houart (scale bar: 0.5 mm)

Axial sculpture of teleoconch whorls consisting of high, strong, broad, rounded, nodose ribs: eight on first to fourth whorls; six on last whorl. Spiral sculpture of strong high cords, decreasing in strength and height on abapical whorls: IP, P1-P3 visible on whorls 1 to 4 (holotype) or on whorls 1 to 3 (paratype coll. R. Houart), whorl 4 with visible IP, P1, s1, P2, P3; last whorl with IP split, P1, s1, P2, s2, P3, s3, P4, s4, P5, P6, ADP, MP; cords more strongly developed at intersection with axial ribs; P1-P3 low, broad, P4 and P5 high, strong; P4-P6 giving rise to small spinelets on axial ribs. Additional spiral sculpture consisting of numerous, small striae. Juvenile (Fig. 1) with small, almost indistinguishable IP, P1-P6, ADP, MP; P2 and P3 largest and strongest, P5 weakest.

Aperture small, ovate; columellar lip broad, smooth, rim partially erect, adherent at adapical extremity; anal notch broad, deep; outer lip weakly erect, crenulate, with strong narrow rounded denticles of similar size within (ID, D1-D5). Siphonal canal short, broad, weakly recurved dorsally, narrowly open, with ADP and MP narrow, ending as small short spinelets on axial ribs.

Beige or light ochre with brown band at shoulder, between P4 and P5, and P5 and P6; crest of axial ribs light brown (paratype) or yellow-ochre (holotype); aperture glossy white with light brown or yellowish patches.

Operculum (Fig. 2) light brown, ovate, terminal nucleus surrounded by 15 or 16 concentric ridges.

Radula not examined.



**Fig. 2.** *Muricopsis haidari* n.sp. Operculum, paratype coll. R. Houart (scale bar: 0.5 mm)

**Figs 3-11**

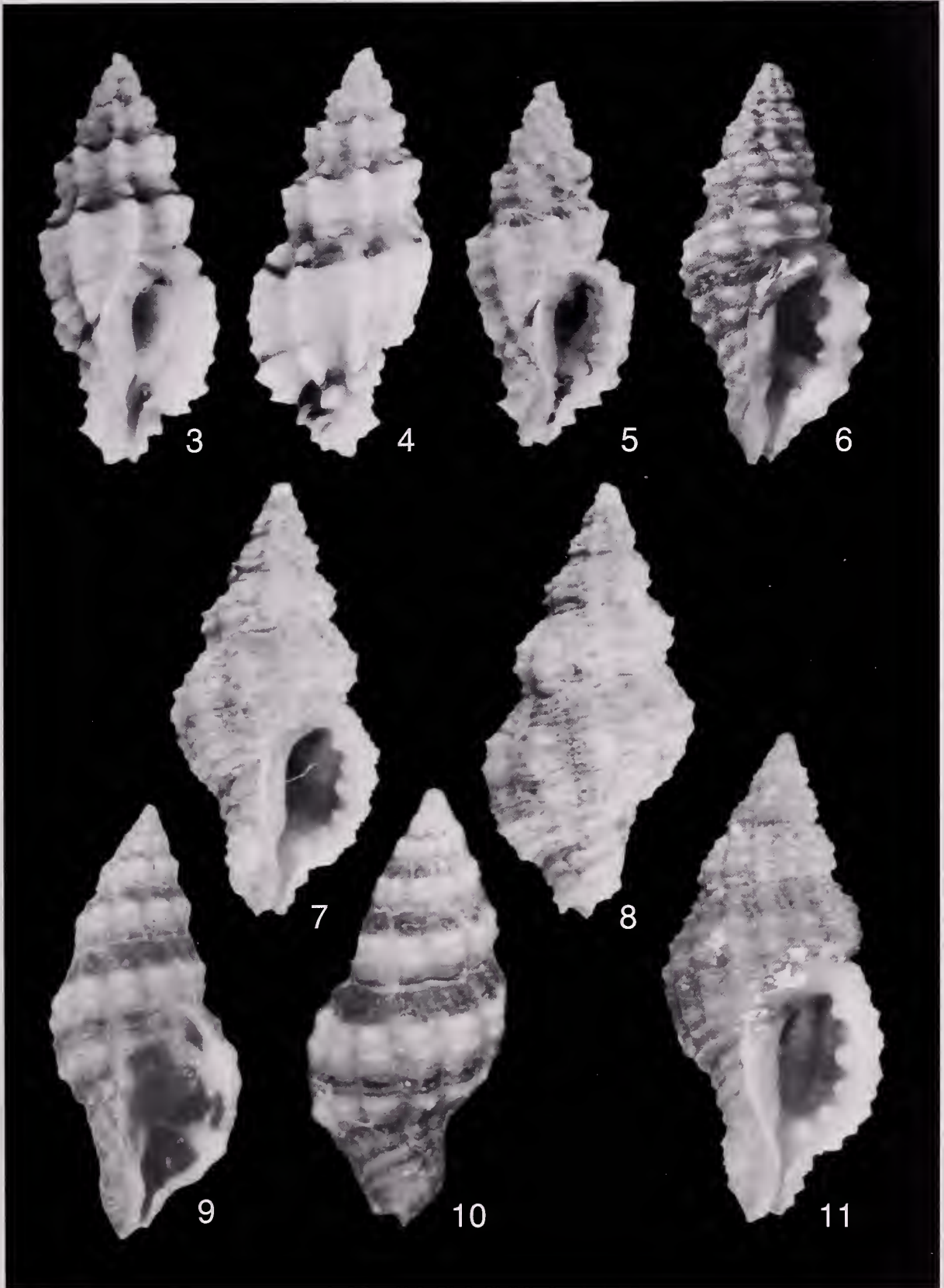
**3-5.** *Muricopsis haidari* n. sp.

3-4. Senegal, Cap Vert, Dakar, Gouye Teni M'Both, basalt, 27 m, holotype MNHN, 8.95 mm; 5. Senegal, Cap Vert, Dakar, TIWA wreck, 32-37 m, paratype coll. R. Houart, 7.5 mm; 6. *Muricopsis rutilus* (Reeve, 1846).

Ghana, coll. R. Houart, 13 mm; 7-8. *Muricopsis seminolensis* Vokes & Houart, 1986. Senegal, Cap Vert, Dakar, ship cemetery, 8.5 m, pebbles and shell sand, coll. J. Pelorce, 9.8 mm.

9-10. *Muricopsis rutilus mariangelae* Rolán & Fernandes, 1991. São Tomé, holotype MCNM, 15.05/1110, 10.6 mm (photo courtesy E. Rolán); 11. *Muricopsis fusiformis* (Gmelin, 1791). Senegal, Cap Vert, Kunk diabar, 30 miles south of Dakar, basalt, 35-45 m, coll. J. Pelorce, 9.9 mm.





**Remarks.** The *Muricopsis*-like species from West Africa have been included in *Risonmurex* by Vokes & Houart (1986a, 1986b), by Houart (1987, 1990, 1993, 1994 and 1996), and by Rolán & Fernandes (1991). However, in a paper studying the shell morphology in Muricopsinae, Merle et al. (in prep.) show that the West African species are closer to *Muricopsis* s.s. than they are to *Risonmurex*. *Risonmurex* Olsson & Macginty, 1958 with four or five living species which are all confined to the Western Atlantic is slightly different in having a broader last teleoconch whorl, a lower spire, and broad axial ribs. *Muricopsis haidari* n. sp. is sympatric with *M. fusiformis fusiformis* (Gmelin, 1791) (Fig. 11) and *M. seminoleusis* Vokes & Houart, 1986 (Figs 7-8). *M. haidari* is very different from *M. fusiformis fusiformis* and does not need to be compared here. It differs from *M. seminoleusis* in being smaller, more slender, in having lower and broader primary spiral cords, fewer or absent secondary spiral cords, narrower axial ribs, and a higher last teleoconch whorl. It differs from *M. rutilus rutilus* (Reeve, 1846) from Ghana (Fig. 6) and *M. rutilus mariangelae* Rolán & Fernandes, 1991 from São Tomé (Figs 9-10), in having a smaller shell with more shouldered whorls, broader and lower primary spiral cords, and an aperture with non-fused D1 and D2 (fused in both *M. rutilus rutilus* and *M. rutilus mariangelae*).

**Etymology.** Named after Mr. Haidar El Ali, Director of the Oceanium of Dakar, without whom this discovery would not have been possible.

Subfamily **OCENEBRINAE** Cossmann, 1903

Genus *Vaughtia* Houart, 1995

Type species by original designation: *Murex babingtoni* Sowerby, 1902). Recent; South Africa.

*Vaughtia squamata* n. sp.

Figs. 12-15

**Type material.** Mauritania, continental slope, 21°15' N, 17°41' W, 505 m, METEOR, stn 60-57, holotype and 2 paratypes (dd) MNHN.

**Distribution.** Presently known only from the type locality.

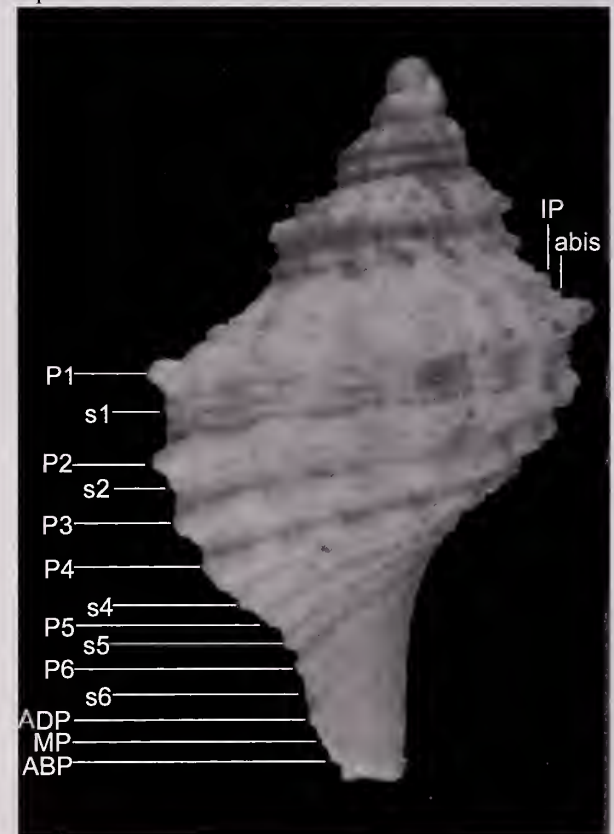
**Description.** Holotype: shell medium sized for the genus, 15.6 mm in length, biconical, lightly built. Spire high with 1.25 protoconch whorls and 4 broad, strongly shouldered teleoconch whorls. Suture

impressed. Protoconch large, whorls rounded, smooth; terminal varix unknown (croded).

Axial sculpture of teleoconch whorls consisting of weak low narrow lamellae: 21 on first whorl, 20 on second, 22 on third, 17 on last. Other axial sculpture consisting of numerous growth striae. Spiral sculpture of high narrow scaly primary and secondary cords: first whorl with visible P1, P2 and P3 (P3 partially overlapped by next whorl), second with P1 and P2, third with IP, P1, s1 (starting), P2, last whorl with IP, abis, P1, s1, P2, s2, P3, s3, P4, s4, P5, s5, P6, ADP, ads, MP, ms, ABP, abs. A single additional thread present between P1 and s1, and between s1 and P2. P1 and P2 more broadly spaced than abapical cords.

Aperture broad, roundly ovate; columellar lip narrow, smooth, lip partially erect, adherent at adapical extremity; outer lip thin with 4 short grooves within, corresponding to P1-P4. Siphonal canal long, narrow, weakly bent abaxially, with ADP, ads, MP, ms, ABP, ads. ADP and MP strongest. Shell whitish.

Operculum and radula unknown.



**Fig. 12.** *Vaughtia squamata* n. sp. Paratype MNHN, 10.7 mm.

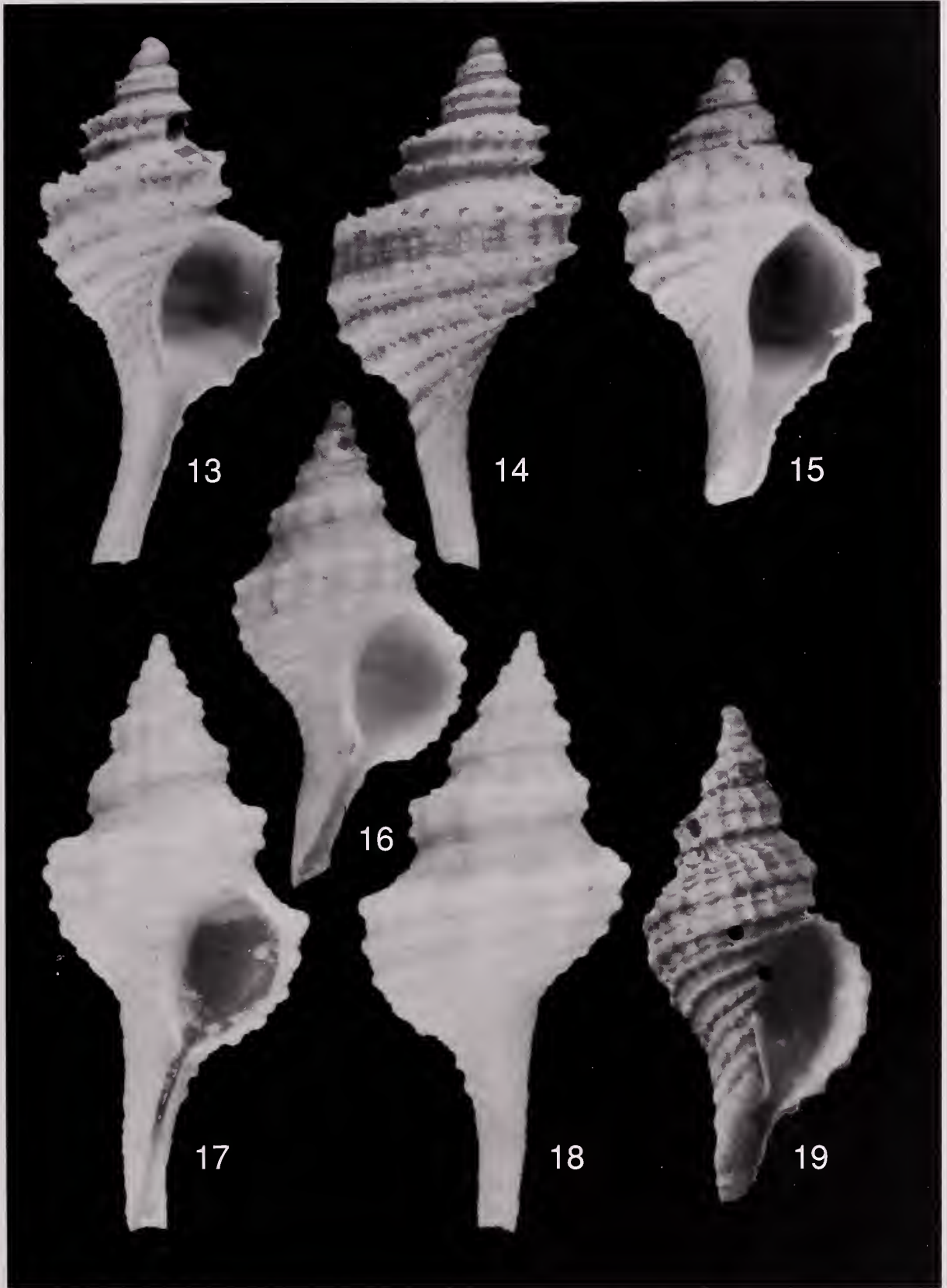
**Figs 13-19.**

**13-15.** *Vaughtia squamata* n. sp.

13-14. Mauritania, 21°15' N, 17°41' W, 505 m, holotype MNHN, 15.6 mm; 15. Paratype MNHN, 10.7 mm.

**16-18.** *Vaughtia grunveli* (Dautzenberg, 1910).

16-17. Mauritania, Pesca de arrastre, trawled in 50-70 m, coll. R. Houart, 15.6 mm; 18. Mauritania, 22°00' N, 17°22' W, trawled in approximately 84 m, coll. R. Houart, 11.3 mm; **19.** *Vaughtia babingtoni* (Sowerby, 1892). South Africa, off Cape St. Blaize, ex pisce, coll. R. Houart (ex NM), 11.5 mm.





**Remarks.** The two paratypes are juveniles with 3 teleoconch whorls and partly broken siphonal canal. *Vaughtia squamata* n. sp. differs from *V. griveli* (Dautzenberg, 1910) (Figs. 16-18), which also occurs off Mauritania, in having more numerous and more lamellate ribs, *V. griveli* having only 10 or 11 rounded ribs on last teleoconch whorl and 12-16 on previous whorls. *V. squamata* n. sp. also has narrower spiral cords with P1 and P2 more broadly spaced, and a weakly convex shoulder instead of concave in *V. griveli*. Moreover, to date I have not observed any additional tertiary cords in *V. griveli*. *V. squamata* differs from *V. babingtoni* (Sowerby, 1892) (Fig. 19) (= *Tritoualia semidisjuncta* Turton, 1932 and *T. aedicularum* Barnard, 1969) from South Africa, in having a more strongly shouldered shell, narrower spiral cords, more broadly spaced P1 and P2, shallower shoulder cords, more numerous axial lamellae, and a longer siphonal canal.

**Etymology.** From the Latin *squamata*: scaly.

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